

# Thermal Insulation Cavity Slab 32

## Tools required

- Insulation saw
- Tape measure

## Product overview

Thermal Insulation Cavity Slab 32 is designed for a full or partial fill external masonry cavity wall constructions as per BBA certificate (22/6252), if installed, used and maintained in accordance with this certificate, it can satisfy or contribute to satisfying the relevant requirements of the Building Regulations.

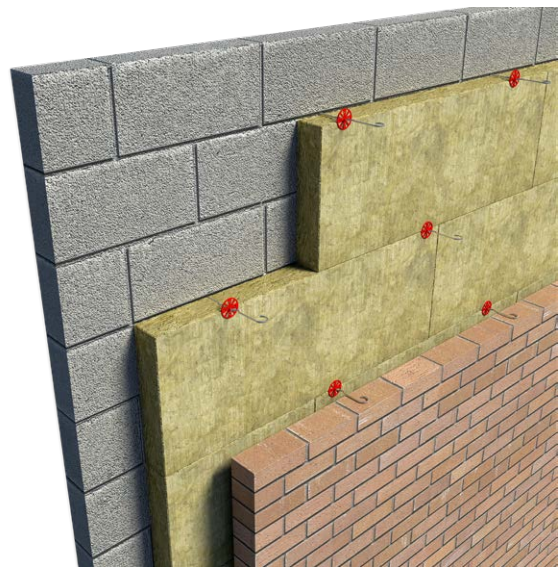
NHBC accepts the use of ROCKWOOL Thermal Insulation Cavity Slab 32, other than in very severe exposure locations with fair-faced masonry, provided it is installed, used and maintained in accordance with the BBA Certificate, in relation to NHBC Standards, Chapter 6.1, External masonry walls.



## Designing the cavity wall

The use of ROCKWOOL Thermal Insulation Cavity Slab 32 does not affect the choice of wall ties to BS EN 845-1:2013+A1:2016. Ties should be selected according to structural requirements, cavity size, building height and location.

1. Consider the dimensional tolerances of the wall before designing the width of the cavity. An extra 5mm above the nominal slab thickness will normally be sufficient.
2. Select bricks conforming to EN771-1 that are appropriate to the exposure class. Refer to annex B of BS EN 1996-2 (Eurocode 6 - Design of masonry structures - Part 2: Design considerations, selection of materials and execution of masonry)
3. Select a lime mortar mix that does not contain detergent-type plasticisers, which reduce the water resistance of the joints.
4. Specify weather-struck, flush or bucket-handle joints. Recessed joints increase the risk of water penetration. Ensure all bed and perpend joints in the external wall are fully filled with mortar.
5. Cavity trays should incorporate stop ends, have weep holes at approximately 450mm centres (or a maximum of 900mm centres) and be continuous across closely spaced openings (Figure 2).
6. Vertical damp proof courses at wall openings should project at least 25mm into the cavity (see ROCKWOOL ROCKCLOSE® data sheet for details).



## Installing ROCKWOOL Thermal Insulation Cavity Slab 32

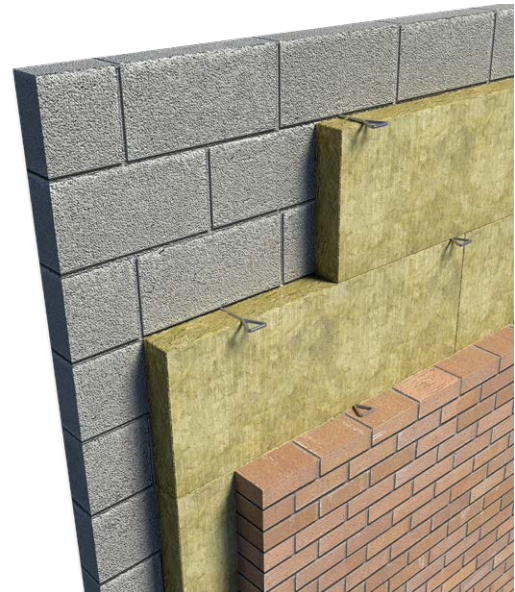
When walls are constructed in the conventional manner, it is recommended that the internal leaf is constructed ahead of the external leaf. This is so that any mortar protruding into the cavity space from the back of the external leaf can be cleaned off before installing the product. Slabs must not be pushed into a completed cavity.

Workmanship should be maintained to minimise the risk of damp penetration to the inside of the home. Gaps compromise thermal performance, provide route for dampness and condensation can form on the cold spots where insulation is missing. Insulation should be closely butted with no gaps.

Insulation should be fixed against the cavity face of the inner leaf. Its thickness and the wall construction should be suitable for the exposure of the home.

Vertical joints in the slabs must be staggered and all joints tightly butted. Where penetrations occur in the cavity, the slabs should be carefully cut to fit.

If installation of the slabs stops below the highest level of the wall, the top edge of the insulation must be protected by a cavity tray and alternate perpendicular joints raked out, to provide adequate drainage of water from the tray.



**Figure 1**  
Wall tie positioning

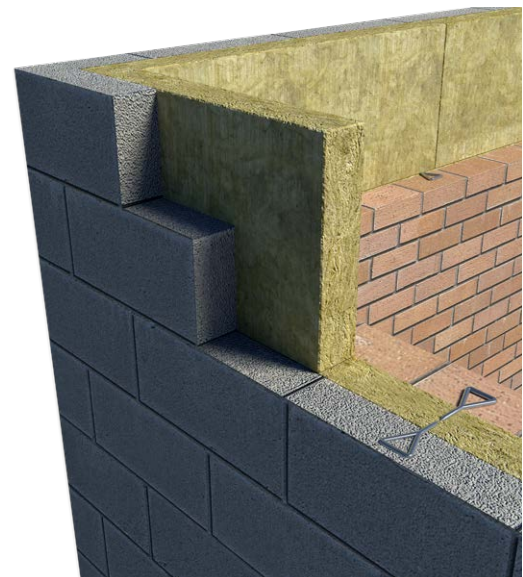
### *Installation steps*

1. The installation of the slabs should commence below the dpc. The first run of slabs should start at least 150 mm below the dpc level to provide some edge insulation for the floor. It is also important that these are not in contact with the ground. Slabs must fit flush against the internal leaf, with a maximum 10mm residual cavity if required, between the insulation slab and the external wall leaf.
2. When using in a full fill application wall ties should be at maximum 900mm centres horizontally and 450mm vertically. When using in a partial fill application wall ties should be at 600mm centres horizontally and 450mm vertically. The width of the first course of slabs can be cut to suit the height of the next row of wall ties. The width of cut slabs should always be 5 mm greater than the width to be insulated, eg wall tie centres.
3. Wall ties should be built in and not pushed into joints, they should be positioned so that they slope downwards towards the outer leaf and should be in rows, i.e not staggered.
4. Additional ties may be required to satisfy the structural requirements and/or to ensure adequate retention of slabs or cut pieces.
5. It is recommended that any mortar protruding into the cavity space from the back of the leading leaf is cleaned off before installing the slabs.

6. Build up a complete section of the leading leaf to one course above the next row of wall ties spaced at a maximum of 900mm horizontally for full fill applications or 650mm for partial fill applications (Figure 1), to ensure that each slab is secured at a minimum of three points in accordance with BS EN 1996-1-2 : 2005. Ensure that all mortar joints are properly filled, particularly the perpend (see Figure 1).
7. Slabs are compressed slightly and placed between the upper and lower wall ties to form a closely jointed run.
8. Before installing each course of slabs, excess mortar must be removed from the inside face of the leading leaf, and mortar droppings cleaned from the exposed edges of the slabs. This is made easier using a cavity board (Figure 2). This sequence should be maintained until it reaches the wall plate or cavity tray. It is important for the insulation to be installed to the highest level of each wall with all areas of the wall insulated.
9. At corner joints, edges must be cut accurately to ensure close butting (see Figure 3).
10. With openings such as doors and windows, it is recommended that a continuous lintel or cavity tray is used. Individual lintels or cavity trays should have stopends and be adequately drained. Slabs should be cut to butt tightly against the cavity barrier/closer/dpc or wall ties.
11. Cut the slabs cleanly, using a sharp, long bladed knife and a straight edge. It is essential that cut pieces of slabs completely fill the spaces for which they are intended and are adequately secured. Gaps must not be left in the insulation.
12. It is essential that all the joints between the insulation slabs are clean and tightly butted.
13. Build up the second leaf to the same level as the slabs.
14. Repeat this sequence to the top of the wall. Alternatively, the top of the slabs can be protected by using a cavity tray.



**Figure 2**  
Use of a cavity board when clearing off mortar



**Figure 3**  
Slabs at corner detail

## Health & safety

Fibres in contact with skin may cause temporary itching.



Cover exposed skin  
When working in unventilated area wear disposable face mask.



Clean area using vacuum equipment.



Waste should be disposed of according to local regulations.



Rinse in cold water before washing.



Ventilate working area if possible.



Wear goggles when working overhead.

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